

FIG. 1A

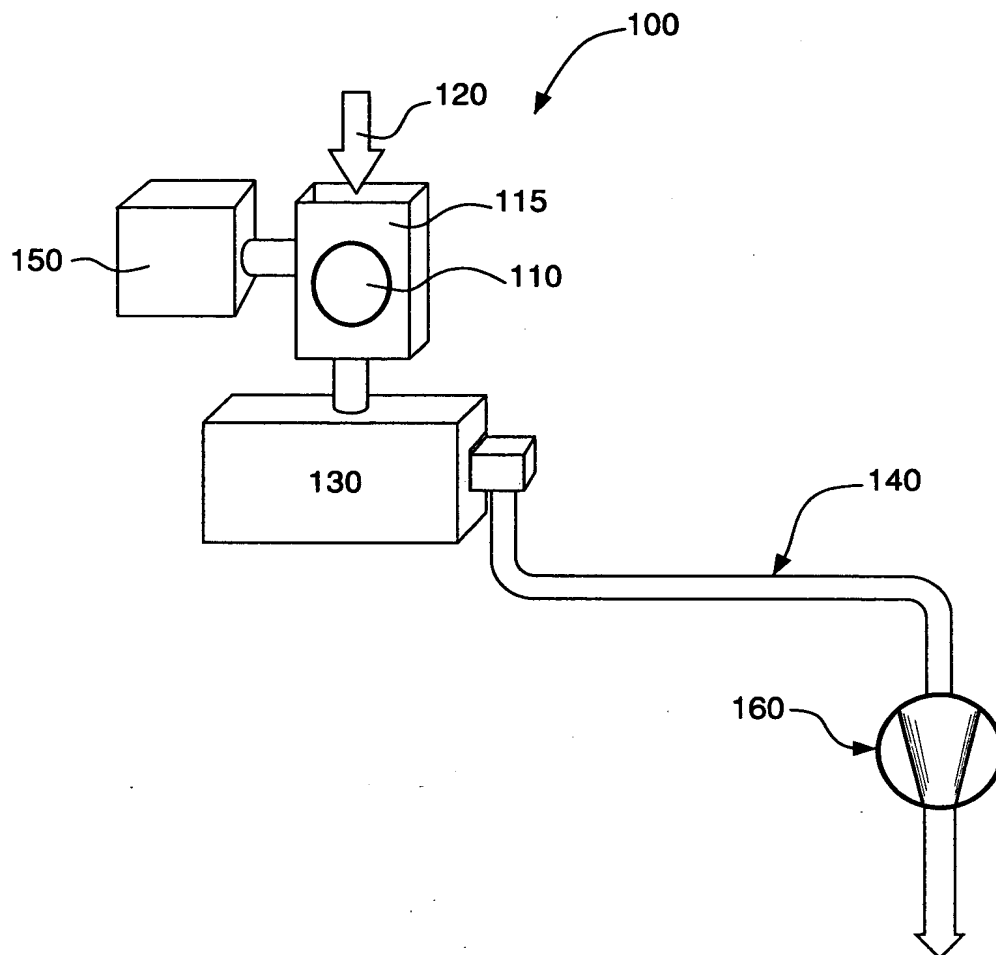


FIG. 1B

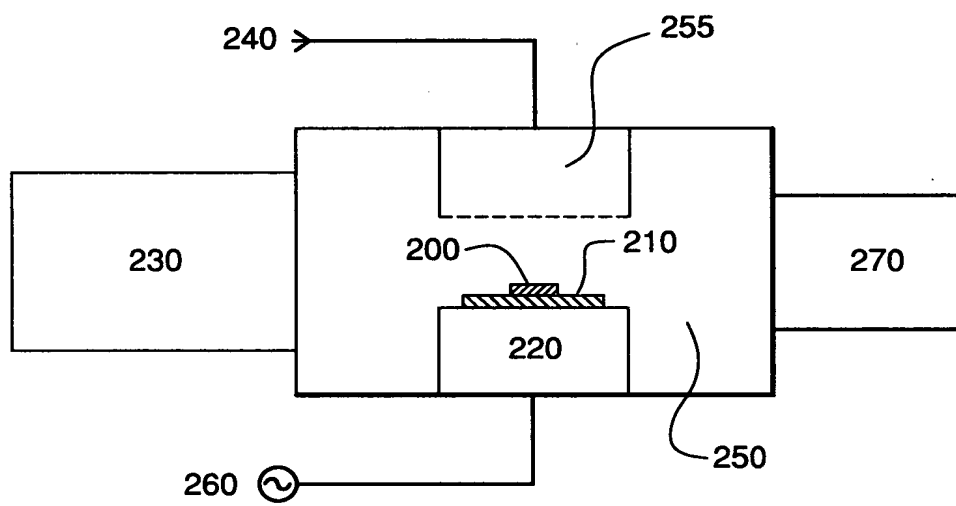
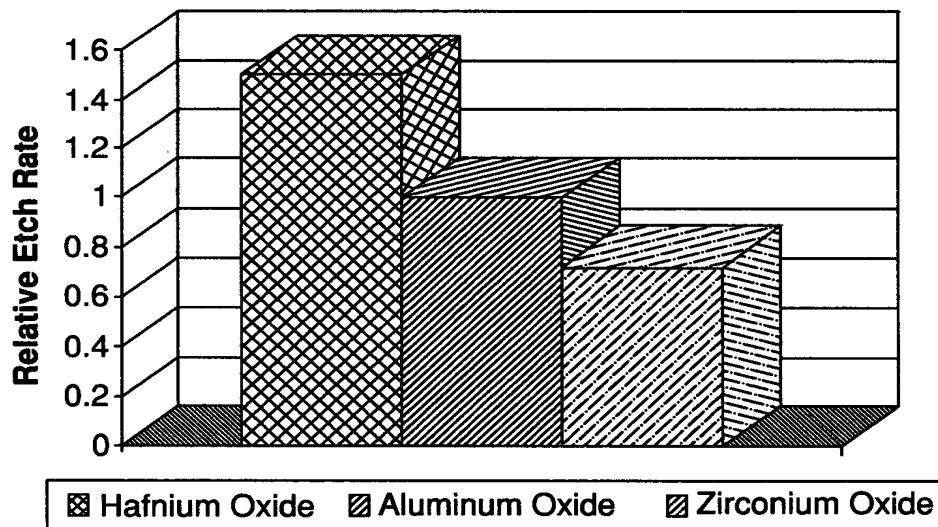


FIG. 2

**$\text{BCl}_3$  Plasma Etching: Etch Rate Comparison  
[ 500 mTorr / 1 Watt/cm<sup>2</sup> ]**



**Relative etch rate comparison for  $\text{HfO}_2$ ,  $\text{Al}_2\text{O}_3$ , and  $\text{ZrO}_2$ .**

**FIG. 3**

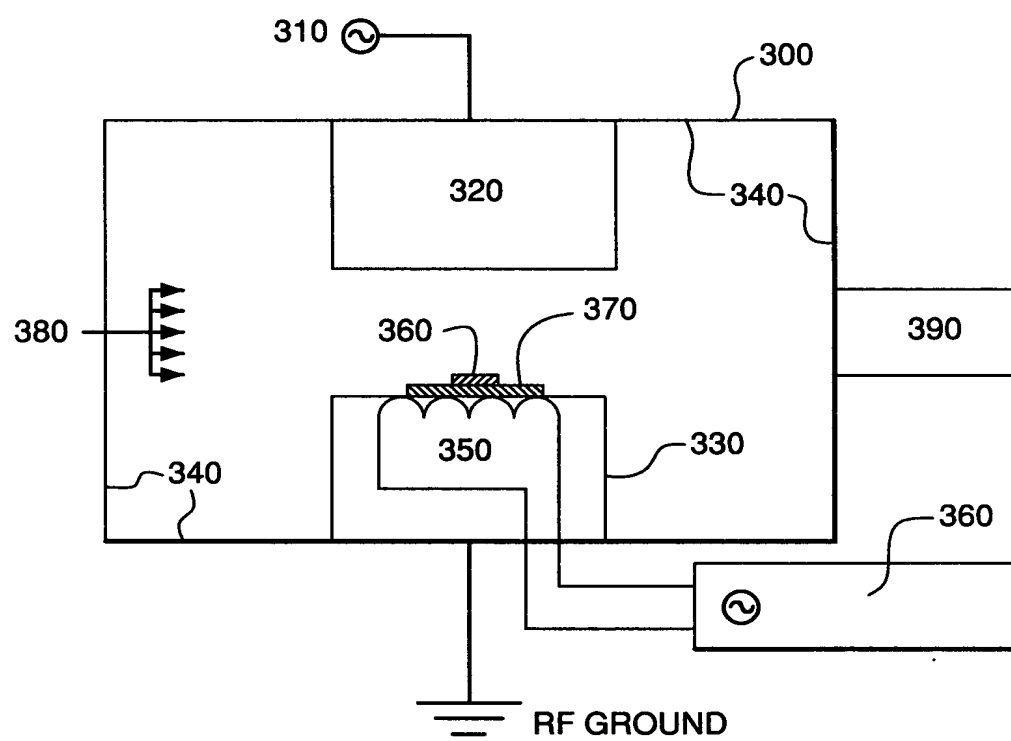


FIG. 4

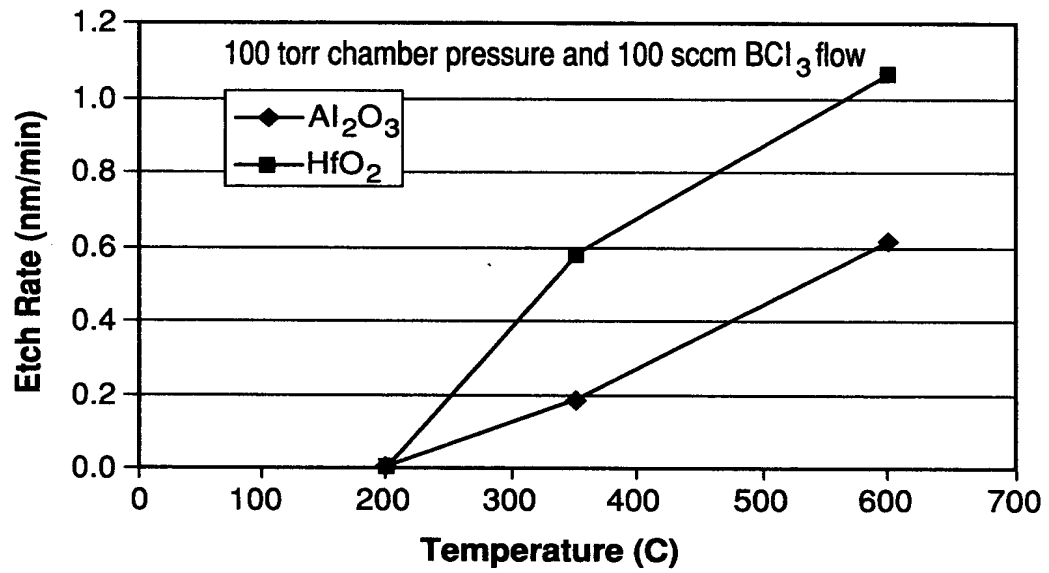


FIG. 5

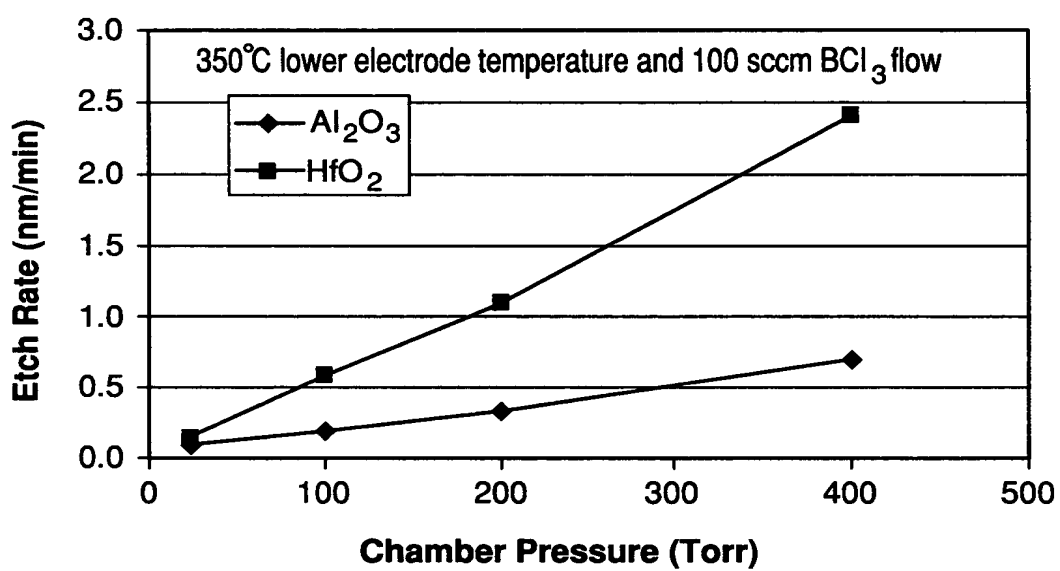


FIG. 6

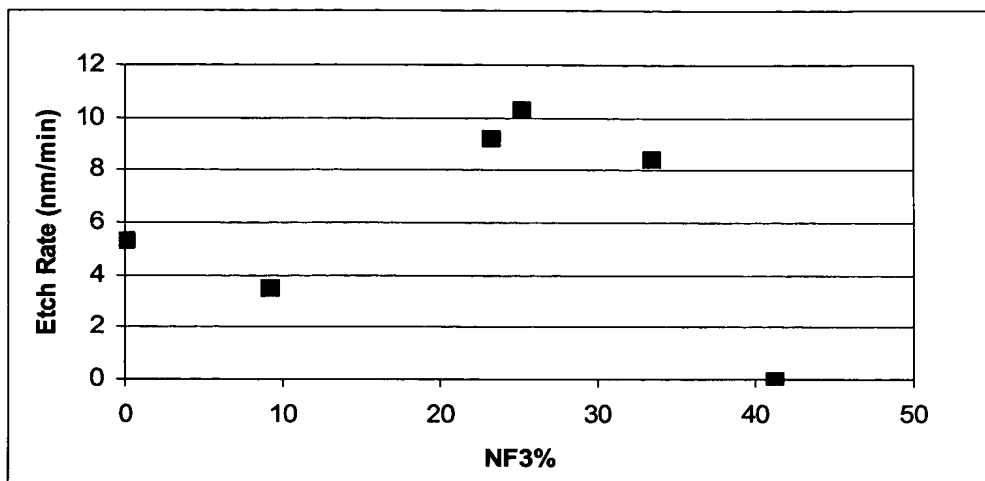


Figure 7a: HfO<sub>2</sub> etch rates at different NF<sub>3</sub> by volume percentages in the gaseous mixture of BCl<sub>3</sub> and NF<sub>3</sub>.

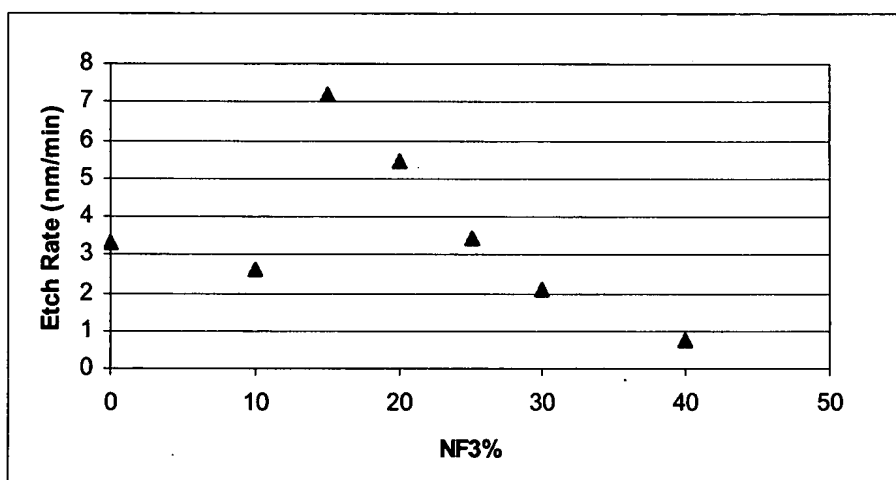


Figure 7b: HfSi<sub>x</sub>O<sub>y</sub> etch rates at different NF<sub>3</sub> by volume percentages in the gaseous mixture of BCl<sub>3</sub> and NF<sub>3</sub>.



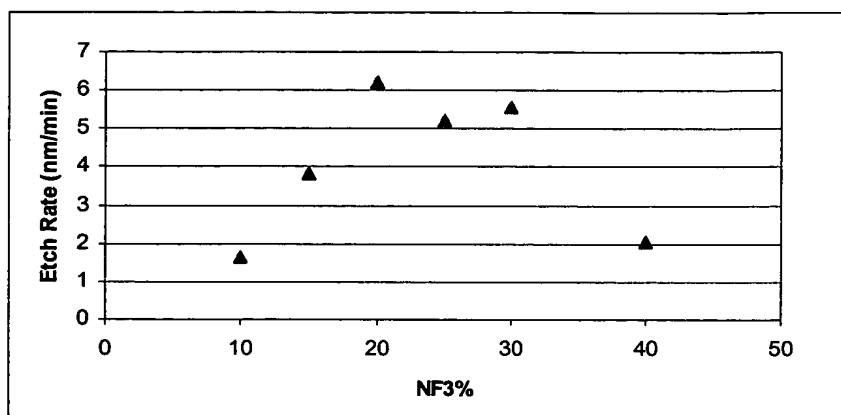


Figure 7c: ZrO<sub>2</sub> etch rates at different NF<sub>3</sub> by volume percentages in the gaseous mixture of BCl<sub>3</sub> and NF<sub>3</sub>.